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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,266	12/03/2003	Gerald Laib	84,374	3264

7590 04/17/2006

Office of Counsel Code OC4
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EXAMINER

CLEMENT, MICHELLE RENEE

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention I, claims 1-7, in the reply filed on 1/17/06 is acknowledged. With regards to applicant's election of species it is noted that applicant has not distinctly and specifically pointed out the supposed errors in the species restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Tapphorn et al. (US Patent # 6,915,964). Tapphorn et al. discloses a method of forming a substrate layer and in situ deposition of a metal layer on the substrate layer along with reactive materials to create an explosive mixture (column 13, lines 29-40). The substrate comprising silicon, the metal layer may comprise copper and may be reacted with a gas phase reactant. The metal layer may be deposited by sputtering.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3641

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tapphorn et al. as applied to claim 1 above, and further in view of Garvick et al. (US Patent # 6,173,650).

Although Tapphorn et al. does not expressly disclose the method also comprising depositing an organic flyer layer on top of the primary explosive layer or forming a barrel in the substrate layer, Garvick et al. does. Garvick et al. teaches a method of making exploding foil initiator utilizing a substrate having a primary explosive formed thereon comprising depositing an organic flyer layer on top of the primary explosive layer and forming a barrel in the substrate layer. Garvick et al. and Tapphorn et al. are analogous art because they are from similar problem solving areas: microminiaturized devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of depositing a flyer and forming a barrel in the substrate as taught by Garvick et al. with the method of forming a substrate and in situ deposition of metals and reacting the metals to form an explosive layer as taught by Tapphorn et al. The suggestion/motivation for doing so would have been to obtain a MEMS safety and arming system that was easier to manufacture as suggested by Tapphorn et al.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hu (US Patent # 6,162,278).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

Art Unit: 3641

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHELLE CLEMENT
PRIMARY EXAMINER